INFCIRC/310

GUIDELINES FOR MUTUAL EMERGENCY ASSISTANCE ARRANGEMENTS IN CONNECTION WITH A NUCLEAR ACCIDENT OR RADIOLOGICAL EMERGENCY

INTERNATIONAL ATOMIC ENERGY AGENCY

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1. On 24 February 1982, the Board of Governors adopted a resolution in which it *requested the Director General to convene a group of experts, open to all* Member States, to study the most appropriate means of responding to the need for mutual assistance in connection with nuclear accidents and of facilitating international co-operation in the area of nuclear safety. The group of experts was convened by the Director General from 28 June to 2 July 1982.[1/] The group of experts recommended, inter alia, the prompt development of a single set of provisions setting forth, in the form of an information circular (INFCIRC), the terms and conditions that could be applied to emergency assistance and could:

(a) serve as a model for the negotiation of bilateral or regional agreements, which are to be encouraged; and

(b) be readily agreed between a requesting and an assisting State at the time of a nuclear emergency.

2. On 18 September 1982, the Board of Governors approved that recommendation and authorized the Director General to implement it in 1983. A group of experts on Guidelines for Mutual Emergency Assistance Arrangements, open to all Member States, was convened by the Director General from 25 to 29 April 1983. Experts and observers from 22 Member States and three international organizations[2/] took part in the meetings. The group of experts recommended a set of Guidelines for Mutual Emergency Assistance Arrangements in Connection with a Nuclear Accident or Radiological Emergency, together with a Technical Annex on Emergency Assistance. The Guidelines and Technical Annex are reproduced herein for the information of, and use by, Member States as they deem suitable for the purposes stated in paragraph 1 above.

1/ Experts and observers from the following Member States and international organizations took part in the meetings: Argentina, Australia, Austria, Belgium, Brazil, Canada, Denmark, Egypt, Finland, France, Federal Republic of Germany, Holy See, Hungary, India, Iraq, Italy, Japan, Republic of Korea, Mexico, Netherlands, Norway, Portugal, Saudi Arabia, South Africa, Spain, Sweden, Switzerland, Turkey, United States of America, Union of Soviet Socialist Republics and Yugoslavia; the United Nations Office of the Disaster Relief Co-ordinator (UNDRO) and the European Atomic Energy Community (EURATOM).

2/ UNDRO, EURATOM and the Nuclear Energy Agency of the Organization for Economic Co-operation and Development.

CONTENTS

1. INTRODUCTION

1.1. The provisions relating to emergency assistance in the event of a nuclear accident or radiological emergency presented herein are recommended as guidelines for use by States for the negotiation of bilateral or regional agreements. These provisions could also be readily agreed to by a special agreement between a requesting and assisting State at the time of a nuclear accident or radiological emergency.[1/]

1.2. The provisions herein do not affect legal or other arrangements that either exist or may be entered, unless expressly agreed otherwise by the parties concerned.

1.3. Nothing herein derogates from the right of States to enter into different arrangements or to vary in any respect the provisions herein.

1.4. No State is required to request or accept, or offer or provide assistance by reason merely of acceptance or use of the provisions herein.

1/ Information on the nature and extent of the assistance which may be required in the event of a nuclear accident or radiological emergency is provided in the Technical Annex.

2.DIRECTION AND CONTROL OF ASSISTANCE

2.1. Within the territory of the requesting State, overall control of and responsibility for the assistance should rest with the requesting State. In particular:

(a) the assistance should be subject to the general direction and supervision of the requesting State within its territory;

(b) the assisting party should designate a person in charge of the personnel and equipment provided by it and should direct such personnel and the use of such equipment in cooperation with the competent authorities of the requesting State. That person should retain immediate authority and operational control over such an assistance team.

2.2 Unless the parties agree otherwise, the assistance should be used exclusively for the purpose for which it was requested.

3. POINTS OF CONTACT AND COMPETENT AUTHORITIES

3.1. States should identify and make known to each other (directly or through the International Atomic Energy Agency) and to the International Atomic Energy Agency their competent authorities and points of contact having primary responsibility for coordinating response operations in the event of a nuclear accident or radiological emergency.[2/]

[2/] The International Atomic Energy Agency maintains a current list of competent authorities and points of contact. The Agency disseminates the list to its Member States at appropriate intervals.

3.2. The points of contact identified pursuant to the preceding paragraph should be those authorized by the States concerned to make and receive requests for, and to accept, offers of assistance, and to receive and transmit communications relating thereto. If the appropriate channels for subsequent communications are different than the initial points of contact, a State should so specify. If appropriate, a working language should be designated.

3.3 Competent authorities of a potential requesting State and assisting party should establish, in planning for response to any nuclear accident or radiological emergency, a joint contingency plan for such an occurrence, which should be updated as necessary. These authorities should consult periodically on the potential implementation of the provisions contained herein.

4. PUBLIC STATEMENTS AND INFORMATION PROVIDED IN CONFIDENCE

4.1. The assisting party and its personnel should not release information to the public on the assistance provided in connection with a nuclear accident or radiological emergency without coordination with the authorities of the requesting State.

4.2. If an assisting party needs to make a public statement or report, for example, to its legislative body, concerning its assistance, the assisting party should to the extent practicable coordinate in advance with the requesting State on the content of the statement or report.

4.3. Information provided in confidence in connection with the assistance - such as commercial, proprietary, diplomatic or physical protection information - should be protected from disclosure by the recipient of the information to the maximum extent possible and should not be misused. However, this does not preclude appropriate regulatory use of such information.

5. REIMBURSEMENT FOR COSTS

5.1. Without prejudice to any responsibility third States or parties may have, the requesting State is responsible to, and should reimburse, any assisting party for its costs, unless otherwise agreed between them.

5.2. The costs of the assisting party include costs incurred for the services rendered by persons or entities acting on its behalf and all the expenses of the assisting party in connection with the assistance.

5.3. Reimbursement should correspond to the reasonable costs incurred, which could cover services (including salaries), subsistence, travel and transport, insurance (inluding insurance of personnel and property of the assisting party), equipment, materials or facilities provided, or the use thereof, and other documented expenses. The assisting party may waive reimbursement for certain costs, for example, costs within its territory and salaries of its government personnel.

6. LIABILITY

6.1. An assisting party should be protected from liability that might arise out of the assistance rendered on the territory of the requesting State.

6.2. In particular, an assisting party and entities and personnel acting on its behalf should not be liable for damage or injury to or loss of life of any person, damage to or loss of any property, or damage to the environment, where caused by the nuclear accident or radiological emergency, or by any actions taken in rendering assistance that has been requested.

6.3. The requesting State should assume all responsibility for defending against claims that might be brought by third parties against the assisting party or entities or personnel acting on its behalf and should hold the assisting party and such entities and personnel harmless in the case of any claim or liability in connection with the nuclear accident, the radiological emergency or the assistance.

6.4. The above paragraphs should not affect liability under any applicable conventions or national law of any State and should not prevent compensation or indemnity under any such conventions or national law.

7. FACILITIES, PRIVILEGES AND IMMUNITIES

7.1. The requesting State should afford personnel of an assisting party and personnel acting on its behalf the necessary privileges, immunities and facilities for the expeditious performance of their assistance functions.

7.2. The requesting State should itself provide, to the extent of its capabilities, any local facilities and services for the proper and effective administration of the assistance.

7.3. The requesting State should ensure the protection and security of personnel of the assisting party and entities acting on its behalf, and their documents and official and personal property.

7.4. Each State should facilitate the movement through its national territory of personnel and equipment involved in a nuclear accident or radiological emergency assistance as well as persons in need of medical treatment as a result of the accident or emergency.

8. PROPERTY AND EQUIPMENT

8.1. The requesting State should permit and facilitate the entry, free of duty, of property to be brought into the territory of the requesting State for the purpose of the assistance.

8.2. The requesting State should ensure the immunity from taxation, duties or other charges and from seizure or requisition of the property brought into the territory of the requesting State by the assisting party or entities or personnel acting on its behalf for the purpose of the assistance.

8.3. The requesting State should permit and facilitate the re-export of such property, free of duty.

8.4. If the assisting party so requests, the requesting State should, to the extent that it is able to do so, arrange for the requisite decontamination of recoverable equipment before its re-export.

9. TERMINATION OF ASSISTANCE

9.1. The requesting State or assisting party may at any time, after appropriate consultations and after having given written notice, request the termination of the assistance.

9.2. Upon such request for termination of the assistance, the requesting State and the assisting party should consult with a view to concluding any operations in progress and facilitating withdrawal of the assistance.

10. SETTLEMENT OF DISPUTES

10.1. In the event of a dispute between two or more parties concerning any of the matters dealt with herein, such parties should consult with a view to the settlement of the dispute by negotiation or by any other peaceful means of settling disputes acceptable to all parties to the dispute.

10.2. Any dispute of this character which cannot be settled in the foregoing manner should, at the request of any party to the dispute, be submitted to arbitration for decision.

TECHNICAL ANNEX ON EMERGENCY ASSISTANCE

GENERAL

1. The nature of assistance which may be required would vary with the nature and extent of the particular emergency situation and the capabilities of the requesting and assisting States. The degree of assistance could vary from the provision of individual specialists to advise on specific problems, to the use of highly complex equipment by teams of technologists.

2. Whilst the extent of assistance is for the requesting State to decide, it should be noted that the response to any nuclear accident or radiological emergency involves a complex series of issues both organizational and technical as well as issues of coordination. A large accident would stretch the resources of many countries, in which case appreciable assistance could be needed.

3. A nuclear accident would be likely to develop through a number of phases. These have been identified (see e.g. reference 1) as:

- The Early Phase: a period commencing with the onset of an accident precursors, generally hours to one to two days;

- The Intermediate Phase: a period generally associated with recovery from the accident and extending from days to weeks after the early phase; and

- The Late Phase: a period generally associated with recovery from the accident and extending from months to years.

4. The speed of initial response to a nuclear accident or radiological emergency could be crucial in minimizing the extent of the physical damage and the subsequent release of radioactive material. Since assistance is likely to be limited during the early phase, it is important that States ensure to as great an extent as possible that they and their operators have their own capability to respond during this phase. Only by a prompt initial response might the radiological consequences to the environment and people in the requesting State and perhaps in other adjoining countries be minimized.

5. A request for assistance should be made as soon as it is determined that help will be needed from outside sources. To enable a potential assisting country to provide the most effective assistance, this request should be accompanied by an exchange of essential information. This information should include a description of the essential elements of the accident as far as it is known, the extent of the requesting State's current capability and the elements of support which might be needed.

6. Essentially, the areas of needs are those associated with[1/]:

(a) the nuclear installation itself or other sources of radiological emergency;

(b) the impact of the accident on the environment and the health and safety of the population; and

(c) the general problems associated with any major disaster or emergency.

7. It is envisaged that specialist assistance may be required within any of these areas.[2/]

1/ The needs for emergency preparedness are described in the IAEA documents listed under references 1 to 4.

2/ It is assumed that the operational organization has its own arrangement with its own suppliers. Examples of possible though not exclusive assistance are given in the IAEA documents listed under references 5 and 6.

8. In some instances the precise determination by the assisting party of the assistance it could give would be difficult without a detailed knowledge of the situation; it might therefore be necessary to ask the requesting State to accept a small advance party of appropriate specialists to be sent to assist in assessment of the scale of problem(s) and the degree and type of help required.

9. The following paragraphs have been drawn up to illustrate areas in which specific assistance might be usefully given.

ON-SITE ACTIVITIES

10. On-site activities which may require assistance would generally consist of protective and corrective operations. These may include professional advice as well as working teams, specific materials and equipment, logistical aids and external facilities.

11. In particular, it may be envisaged that expert professional advice by telecommunication links may be required at the early stage for helping in diagnosis of the problems, forecast of developments and choice of corrective actions. At a later stage, help may also be needed in reviewing the causes of the accident, which will be of value in assessing the damage to the plant and in planning appropriate recovery operations.

12. Highly qualified personnel would be required for radiation monitoring and other purposes. If radiation fields are high or the operations extended in time or scope, it may be necessary to make extra provisions for replacement of staff.

13. The range of equipment and materials that may be needed could inlcude anything from survey-meters and protective equipment, or shielding materials, to sophisticated remote sensing devices and mechanical robots. It may include computing aids (hardward and software), general or highly specific components and replacement parts for the plant.

14. External facilities such as hospitals, counting and spectrometry laboratories, mechanical and electronic workshops would be involved in the general effort, and here again external assistance may be needed.

15. It must be borne in mind that the activities associated with the plant itself may be quite prolonged, possibly extending over many months. Professional aid in both expert manpower and equipment may be needed throughout this period.

OFF-SITE ACTIVITIES

16. Also for off-site activities outside assistance may be requested. Such assistance may provide scientific advice and technical assistance to those who are faced with the requirement to monitor for radiation, provide for control of access and egress, provide personal protection methods, recommend evacuation, provide for decontamination, medical care, diversion of food and water supplies. The assistance may take the form of a team of highly skilled scientists and technical personnel actively involved in operations and research pertaining to nuclear radiation emergencies. The actual make-up of an assistance team will vary, reflecting the nature of the particular emergency situation and the assistance requested. The assistance may consist of personnel, technology and equipment according to the situation. The assistance team should, after approval, be prepared to move rapidly to the emergency site. In some cases, materials to be sampled would be sent from the site of the emergency to the laboratory of the assisting party.

17. Personnel required may include: chemists, communications personnel, data analysts, engineers, health physicists, logisticians, medical personnel, meteorologists, photographers, nuclear physicists, physicians, biologists, pilots and ground crew.

18. Technology provided in the assistance team could include: aerial photography, chemical analysis, gamma ray spectral analysis, low level radiation detection, radiation intensity mapping, bioassay and techniques for radiation monitoring.

19. Equipment that could be made available as part of the assistance may include: airborne radiation detectors, aircraft (helicopters and fixed wing), communication systems, computers (field, portable and laboratory), groundborne and seaborne vehicles, handheld radiation detectors, whole-body counters, decontamination facilities, laboratory physical measurements equipment including sampling, navigation systems, mobile meteorological stations and general emergency relief equipment.

20. Finally, it should be emphasized that:

- the response to the early phase of a nuclear accident or radiological emergency must depend on the capability of the operating organization of the nuclear facility involved and the supporting national infrastructure for responding to emergencies;

- the most effective assistance can be provided if proper prior integration of the assistance into the national emergency plan is made and the plan, including elements of assistance, is periodically tested; and

- the exchange of relevant information should be established and maintained among competent national authorities and operating organizations of nuclear facilities.

References

1. Planning for Off-Site Response to Radiation Accidents in Nuclear Facilities, Safety Series No. 55, IAEA Vienna, 1981.

2. Preparedness of Public Authorities for Emergencies at Nuclear Power Plants, Safety Series No. 50-SG-G6, IAEA Vienna, 1982.

3. Preparedness of the Operating Organization (Licensee) for Emergencies at Nuclear Power Plants, Safety Series No. 50-SG-O6, IAEA Vienna, 1982.

4. Emergency Response Planning for Transport Accidents Involving Radioactive Materials, IAEA-TECDOC-262, IAEA Vienna, 1982.

5. Mutual Emergency Assistance for Radiation Accidents, IAEA-TECDOC-237, IAEA Vienna, 1980.

6. Mutual Emergency Assistance for Radiation Accidents, Supplement to 1980 Edition, IAEA-TECDOC-284, IAEA Vienna, 1983.